

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

**Listing of Claims:**

- 1-10. (Cancelled)
11. **(Currently amended)** A method of treating pain which comprises administering spongiosine (2-methoxyadenosine) to a human subject in need of such treatment.
12. (Previously Presented) The method of claim 11, wherein the pain is hyperalgesia.
13. (Previously Presented) The method of claim 12, wherein the hyperalgesia is neuropathic pain.
14. (Previously Presented) The method of claim 11, wherein the pain is caused by or associated with damaged sensory neurons.
15. (Cancelled)
16. (Previously Presented) The method of claim 12, wherein the hyperalgesia is inflammatory pain.
17. (Previously Presented) The method of claim 11, wherein the pain is caused by or associated with inflammation.
18. (Cancelled)

19. (Previously Presented) The method of claim 11, wherein spongosome is administered at a dose that gives rise to plasma concentrations one fifth to one thousandth of the minimum plasma concentration of spongosome that gives rise to bradycardia, hypotension or tachycardia side effects in animals of the same species as the subject to which the dose is to be administered.
20. (Previously Presented) The method of claim 19, wherein the dose gives rise to plasma concentrations one fifth to one hundredth of the minimum plasma concentration of spongosome that gives rise to the side effects.
21. (Previously Presented) The method of claim 11, wherein spongosome is administered at a dose that is one fifth to one fiftieth of the minimum dose of spongosome that gives rise to bradycardia, hypotension or tachycardia side effects in animals of the same species as the subject to which the dose is to be administered.
22. (Previously Presented) The method of claim 21, wherein the dose is one fifth to one tenth of the minimum dose that gives rise to the side effects.
23. (Previously Presented) The method of claim 11, wherein spongosome is administered at a dose of less than 6 mg/kg.
24. (Previously Presented) The method of claim 11, wherein spongosome is administered at a dose of at least 0.01 mg/kg.
25. (Previously Presented) The method of claim 11, wherein spongosome is administered at a dose of at least 0.1 mg/kg.
26. (Previously Presented) The method of claim 25, wherein spongosome is administered at a dose of 0.1 to 1 mg/kg.

27. (Previously Presented) The method of claim 11, further comprising administering an analgesic agent other than spongosome to the subject.
28. (Previously Presented) The method of claim 27, wherein the analgesic agent other than spongosome is an opioid receptor agonist, an opioid receptor partial agonist, a cyclooxygenase inhibitor, a sodium channel modulator, a calcium channel modulator, a Selective Serotonin Reuptake Inhibitor (SSRI), or an agent that treats neuropathic pain.
29. (Previously Presented) The method of claim 11, wherein spongosome is administered orally, parenterally, sublingually, transdermally, intrathecally, or transmucosally.
30. (Previously Presented) The method of claim 11, wherein spongosome is administered at a frequency of 2 or 3 times per day.
31. (Previously Presented) The method of claim 11, wherein the subject is a human subject.
- 32-46 (Cancelled)
47. (Previously Presented) The method of claim 11, wherein the spongosome is administered to the subject when the subject is at risk of developing inflammation.
48. (Previously Presented) The method of claim 47, wherein the spongosome is administered to the subject when the subject is contacted with an inflammatory stimulus.
49. (Previously Presented) The method of claim 11, wherein the spongosome is administered to the subject when the subject is at risk of developing pain.
50. (Previously Presented) The method of claim 49, wherein the spongosome is administered to the subject before the subject is exposed to a pain stimulus.

51. (Previously Presented) The method of claim 49, wherein the pain is associated with or caused by inflammation.
52. (Previously Presented) The method of claim 49, wherein the pain is associated with or caused by thermal hyperalgesia.